



# **Technical Support and Training for Electricity Supply Analysis**

California Energy Commission

Request for Proposals

RFP #800-10-801

Pre-Bid Conference

Date: March 1, 2011



# Proposal Requirements

## REQUIRED FORMAT FOR PROPOSAL RESPONSE

- Consists of Three Sections
- Section 1 – Administrative Response
- Section 2 – Technical Response
- Section 3 – Cost Proposal



# Section 1, Administrative Response

Every Proposer must complete and include the following in **Section 1**.

## Section 1, Administrative Response

- Cover Letter
- Table of Contents
- Contractor Status Form
- Darfur Contracting Act Form
- Small Business Preference Certification (if applicable) (Or Non-Small Business Preference)



# Section 1, Administrative Response

- Completed DVBE forms
- Bidder Declaration Form GSPD-05-105
- Signed Certification Clauses
- Target Area Contract Preference Act Forms (if applicable)
- Enterprise Zone Act Forms (if applicable)
- Local Agency Military Base Recovery Act Forms (if applicable)



## Section 2, Technical Response

Every Proposer must complete and include the following in **Section 2**.

- Approach to Tasks in Scope of Work
- Prime Contractor Experience
- Invoicing
- Team Qualifications and Relationships
- Team Member Experience and Capabilities
- Team Organizational Chart
- Previous Work Products
- Client References



## Section 3 – Cost Proposal

Every Proposer must complete and include the following in **Section 3**.

- Unloaded Hourly Rates, Attachment B-1
- Indirect Costs, Attachment B-2
- Loaded Hourly Rates, Attachment B-3



# Small/Non-Small Business Preference

- Small Business Preference – Certified Small Businesses or microbusinesses can claim the five percent preference when submitting a proposal. See RFP, Attachment 3.1 for more information.
- Non-Small Business Preference – Bidder commits to small or micro business subcontractor participation of 25% of net bid price. See RFP, Attachment 3.1 for more information.



## **Disabled Veteran Business Enterprise (DVBE) Requirements**

Full DVBE participation (3% of total Agreement amount)

Proposer commits to meet or exceed the DVBE participation requirements by either of the following methods:

Method A1 – Proposer is a Certified DVBE

Method A2 – Subcontractor is a certified DVBE and will receive at least 3% of the Agreement amount



## Tentative Key Activities and Dates

Deadline for Written Questions –March 1, 2011 5p.m.

Distribute Questions/Answers and Addenda (if any) to  
RFP – March 8, 2011

**Deadline to Submit Proposals by 3:00 p.m. –March  
30,2011**

Notice of Proposed Award – April 13, 2011

Projected Commission Business Meeting – May 18,2011



# Program Overview

## Task 1: Contract Management

- Kick-off meeting: Administrative and technical aspects are discussed.
- PREPARE AND SUBMIT INVOICES FOR EXPENSES INCURRED UNDER THIS CONTRACT.
- MANAGE AND COORDINATE SUBCONTRACTOR ACTIVITIES.
- MONTHLY PROGRESS REPORTS WHICH SUMMARIZE ALL CONTRACT ACTIVITIES. THIS SHOULD INCLUDE AN ASSESSMENT OF THE ABILITY TO COMPLETE THE CONTRACT WITHIN THE CURRENT BUDGET AND TIMELINE.
- comprehensive written Final Report that describes the original purpose, approach, results and conclusions of the work done under this contract



### **TASK 2: ELECTRICITY SYSTEM AND INFRASTRUCTURE ANALYSIS**

ANALYSIS OF CAPACITY REQUIREMENTS OVER A 20 YEAR TIME FRAME LOOKING AT DIFFERENT DEMAND, TRANSMISSION UPGRADE SCENARIOS.

ANALYSIS OF BULK TRANSMISSION PROJECTS FOR THE INTEGRATION, THE NEED FOR LOCAL TRANSMISSION, ENERGY STORAGE, AND ENERGY IMPORTS.

ASSESS, AND MAKE RECOMMENDATIONS REGARDING IMPROVEMENTS TO MODELING TECHNIQUES RELATED TO ELECTRICITY SYSTEM INTEGRATION. MAY INCLUDE DEVELOPING IN-HOUSE TOOLS WITH CEC STAFF.

HELP WITH DISTRIBUTION SYSTEM PLANNING PROCESS AND METHODOLOGIES.

ANALYZE THE COSTS, ECONOMICS, OPERATING CHARACTERISTICS, AND OTHER FACTORS THAT MAY IMPACT DISTRIBUTED GENERATION TECHNOLOGIES.



### **Task 3: Improve Demand Forecasting Methods**

Identify and assess various peak demand forecasting methodologies and techniques currently being used by other industry and academic experts.

Develop methods to improve demand forecasting for the Residential, Commercial, Industrial, Power Generation, and other electricity sectors.

Provide analytical and data collection in support of efforts to improve data on generating hourly load profiles, customer response to price, and other changes in consumer tastes and preferences take place through time.

Transfer sector models coded in Fortran to the SAS platform.



### **Task 4: Improve Energy Demand Analyses**

Provide analysis on current and forecasted efficiency programs of California utilities and their impacts on state energy consumption.

Develop a forecasting methodology for commercial sector adoption of electricity self-generation technologies, including photovoltaic systems.

Identify, assess, and implement behavioral methodologies to forecast adoption of energy efficiency measures.

Develop an econometric model to measure impacts of efficiency standards and programs on energy consumption and peak demand using a “top down” approach.



### **Task 5: Natural Gas Assessment And Forecasting**

Evaluate the capacity of natural gas storage facilities in California and the United States.

Assess the need for pipelines in California and the United States.

Evaluate potential impact to natural gas supplies to California from a switch from coal used for power generation in other states to natural gas.

Assess potential of shale gas supply and other unconventional sources of natural gas (methane hydrates, tight gas, coal bed methane, etc.) in the next 20 years

Assess potential of LNG supply to California in the next 20 years.

Assist staff in refining the methods and methodologies used to forecast natural gas parameters.



### **Task 6: Central Station And Distributed Generation Market Assessment And Analysis**

Update the cost drivers for fossil generation technologies.

Assist staff in developing estimates of technical and market potential for Combined Heat Power (CHP) for different technologies.

Assess the implications of the large-scale deployment of CHP from various economic sectors and their implications for the development of other generation resources needed to meet electricity demand in California.

technical support for the economic assessment of emerging and mature solar thermal and photovoltaic technologies.

Provide technical support for the evaluation of the operation of renewable resources based on technology and location. Create operating profiles, capacity factor estimates, variability and peak hour availability estimates



## Questions and Answers

- QUESTION AND ANSWER SESSION
- QUESTIONS ARE DUE BY March 1, 5 p.m.



## Whom to Contact?

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